STS-113 Rev 1

*3026616 * OCT 28 '02

PROCESSING OPERATIONS CONTROL
OMI PLANNING SHEET

Wad Number	SITE	Elem CD	End Item	
V6028.001-A04-R01	SLF	V	105 FLT: 019	DATE: 10/24/2002 TIME: 15:19:18

Title: POST FLT ORB REUSABLE SURFACE INSULATION RUNWAY ENGINEERING WALKDOWN

Sub Element/Zone: 30

Project Work Order No.	Hazard:	SFOC Safety	
	☐ Yes ☒ No	N/A	☒ Local Copy ☐ Firing Room Copy

Authorizing Document	Material & Equipment:	MICR Req'd	OMRS:
VPL519	☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No

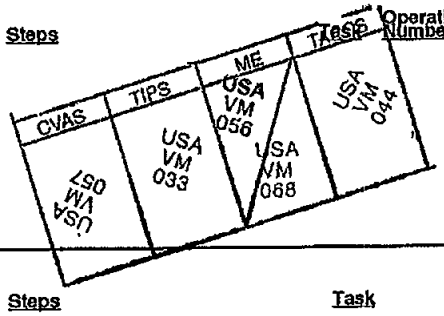
PERFORM THE FOLLOWING:

Pre-Ops Setups

Task	Operation Number	Seq	Steps	Task	Operation Number	Seq	Steps

OPS Support

Task	Operation Number	Seq	Steps	Task	Operation Number	Seq	Steps



Operating Instructions

Task	Seq	Steps	Task	Seq	Steps
	010				
	020				

Post Ops

Task	Operation Number	Seq	Steps

Appendices

Task	Seq
N/A	

USA VM 075

Subtask WAD's

N/A

Planner		Ext	QC Closure	Date	Page
MARSHALL MOORE	WC 032 USA	6516	SPC 883	JAN 03 '03	1 OF 1

07-05-2001
APPROVED

OMI V6028.001 A04
APPROVED

POST FLT ORB REUSABLE SURFACE INSULATION RUNWAY ENGINEERING WALKDOWN

Element/End Item: **102, 103, 104, 105**
Flow/Usage: **NA**
Facility: **AAFB, BANJUL, BENGUE, DFRF, ELS, HAFB, MORON, SLF, WSSH, ZARAG**
Design Center Concurrence: **NA**
Category: **F**
OPR: **TPS**
TTL ORG: **SE**

This document does not contain hazardous operations.

Table of Contents:

1.0 INFORMATION

1.1 Objective

To perform post-landing survey/inspection of Orbiter Thermal Protection Subsystem (TPS) to determine if components exhibit obvious damage that would require reservicing, repair, redesign or replacement.

1.2 Special Instructions All Operations

1. Suspect nonconformance's shall be augmented by various other nondestructive methods (shims, etc.).
2. Unless otherwise specified, inspection(s) shall be accomplished visually.
3. Handling or movement of components shall be held to a minimum.
4. Inspection steps may be performed out of sequence and/or concurrently in different areas.
5. Special precautions in handling RSI:
   - RSI ceramic tiles are very fragile and easily damaged. The highly porous, low density ceramic fibermat core is exceptionally low in tensile and compression strengths. Glaze on five faces of the tile is a thin brittle glass over a core offering very low resistance to crushing stresses. Slight finger pressure can often fracture the glaze making repair or replacement necessary. Exterior glass fabric or flexible insulation blankets, gap fillers and thermal barriers are easily snagged, abraded and damaged. RSI replacement and repair is difficult, expensive and time consuming.

   - Tile glaze is designed to seal outer surface of tile and provide critical optical properties. Properties may be partially lost or destroyed by fingerprints or contamination on the glazed surface. Contamination on nonglazed faying surface may significantly affect attachment-bonding characteristics.

6. Mandatory precautions in handling RSI:
   - Wear clean white low-lint gloves when handling tile or tile subassemblies and subassembly components (strain isolator pads and filler bars), flexible insulation blankets and blanket components, thermal barriers and/or gap fillers.
   - Handle delicate tiles and tile subassemblies with extreme care to avoid fracturing the thin brittle glass surface glaze by squeezing, bumping or dropping.
   - Use extra caution to avoid bumping RSI when positioning work stands in RSI work or storage areas.
   - Comply with tethering/taping instructions.

7. During inspection, adequate lighting shall be obtained if not available in inspection area.

1.3 Operations List

Operation		Shop/ Cntl Rm Console	OPR	Haz (Y/N)	Duration (Hrs)
No.	Title				
10	TASK TEAM READINESS	TPS/ NONE	TPS	N	0.3
20	TPS ENG LANDING QUICK LOOK	TPS/ NONE	TPS	N	2.0

2.0 SAFETY INFORMATION

2.4 Reference Safety Documentation

Number	Rev	Title
KHB 1710.2	LI	KSC Safety Practices Handbook
GSOP 5400	LI	Ground Safety Operating Procedure

3.0 STAGING REQUIREMENTS

4.0 PLANNING REQUIREMENTS

OIR Required Yes [ ], No [X]

4.4 Support Services, Commodities, and Equipment

4.4.9 Vehicles, Ground Support Equipment, and Special Equipment

- (1) A72-0812, Access Stand, 11 to 29 ft
- (2) Hi-Ranger, 50 ft

4.4.13 Other Support (KSC)

- Nondedicated support shall be requested via STS/Payload KSC Integrated Control Schedule.

5.0 CONFIGURATION ACCOUNTING AND VERIFICATION

5.1 Specific OMRS Requirements Satisfied by this TOP

OMRS NO.	NOMENCLATURE/ EFFECTIVITY	SEQ-STEP (CAP)
V09AJ0.097	POST LANDING RUNWAY QUICK LOOK INSP	20-001
L03	V02F14-90 V03F16-90 V04F14-90 V05F4-90	

OPERATION 10 TASK TEAM READINESS

Shop: **TPS**
Cntrl Rm Console: **NONE**
OPR: **TPS**
Zone: **100**
Hazard (Y/N): **N**
Duration (Hrs): **0.3**

Call To Stations

10-1 Verify constraints status.

TTL: ______

10-2 Verify following personnel on station and ready to proceed with inspection.

TTL: ______

Table 10-1 Required Personnel	
NASA KSC TPS Eng	1
SFOC TPS Eng	1
LSS TPS Eng	1

***** End of Call To Stations *****

*** End of Operation **10** ***

OPERATION 20 TPS ENG LANDING QUICK LOOK

Shop: **TPS**
Cntrl Rm Console: **NONE**
OPR: **TPS**
Zone: **100**
Hazard (Y/N): **N**
Duration (Hrs): **2.0**

TPS Engineering Team Post-Landing Runway Quicklook Inspection

NOTE

Post-landing runway quicklook inspection is to be performed after scheduled landing immediately following vehicle hazard and safety inspection. For unscheduled landing, perform as soon as practical.

Engineering shall assess overall vehicle TPS post-flight condition while placing special emphasis on potential impacts to TPS turnaround processing.

Team shall consist of NASA KSC, SFOC and LSS TPS Engineering.

Grossly anomalous conditions must be identified for PR initiation and addressed as soon as practical to support ferry flight and other post-flight turnaround activities.

20-1 TPS Engineering Team perform post-landing Orbiter walkdown visual inspection for gross TPS damage/anomalies. Sign upon completion of inspection.

OMRSD V09AJ0.097

NASA KSC SE _____ Date 12-7-02

SFOC SE _____ Date 12.7.02

LSS TPS _____ Date 12/7/02

20-2 Engineering and debris team take samples as deemed necessary. Document all samples in Table 20-1 (Sample Log). Before any samples are taken, obtain the following concurrence:

~~SFOC TPS Eng~~ _____ Date _____

NASA TPS Eng _____ Date _____

LSS TPS Eng _____ Date _____

(Not Performed:)

RETURN
11-07-01
NO SAMPLE NECESSARY

Table 20-1 Sample Log				
Item	Part Number	Location	Remarks TPS Eng Team Signature	N/P
1				NP
2				NP
3				NP
4				NP
5				NP
6				NP
7				NP
8				NP
9				NP
10				NP

***** End of TPS Engineering Team Post-Landing Runway Quicklook Inspection *****

NOTE
Do not perform 20-3 if no debris samples were taken in the previous step.

20-3 Route samples with P/N, vehicle location and other pertinent data to NASA Debris Team Leader for analysis.

SFOC TPS Eng _____ Date _____

Not Performed: _____ 12-07-02

*** End of Operation **20** ***

```
*************************************************
*                                               *
*        PROGRAM PRA120 SELECTION CRITERIA      *
* --------------------------------------------- *
*                                               *
*        RPT TYPE: IPR                          *
*                                               *
*        PR GROUP:                              *
*                                               *
*    WORK AREA CD:                              *
*                                               *
*      PR ELEM CD:                              *
*                                               *
*          STS NO: 115                          *
*                                               *
* Starting RPT DT: 09/20/02                     *
*                                               *
*   Ending RPT DT: 01/02/03                     *
*                                               *
*  LRU or Non-LRU: B                            *
*                                               *
*    PRACA EFF CD:                              *
*                                               *
*            EICN:                              *
*                                               *
*      RPT STATUS: OP                           *
*                                               *
* DETECTED DURING: V6028.001-A04-R01            *
*                  S5022.100-A01-R01            *
*                  V9046.020-C02-R01            *
*                                               *
* --------------------------------------------- *
* Sorted by DETECTED DURING, PR ELEM CD, and EICN *
*                                               *
*************************************************
```

****
*
* NO DATA FOUND ON THE DATABASE FOR THE SELECTED PARAMETERS *
*
****

****
*
* END OF REPORT *
*

USA

United Space Alliance

Pen and Ink Change Record

WAD NO./REVISION		EFFECTIVITY	
Tracking Number	Page	Seq/Op - Step	Eng App
Tracking Number	Page	Seq/Op - Step	Eng App
Tracking Number	Page	Seq/Op - Step	Eng App
Tracking Number	Page	Seq/Op - Step	Eng App
Tracking Number	Page	Seq/Op - Step	Eng App

Internal Letter

Date:	February 13, 2003	No.	CIO-03-006
	(Name, Organization, Internal Address)		*(Name, Organization, Internal Address, Phone)*
To:	ALL USA EMPLOYEES	From:	Kathy Tamer and Neal Hammond

Subject: USA REQUESTING, DISTRIBUTING AND LOGGING IMPOUNDED INFORMATION

In order to provide ready access to information regarding USA impound data and requests, we are maintaining the inventory and request logs in Documentum. The process for requesting, distributing and logging impounded information is provided below

A. Requests for non-impounded information or access to non-impounded IT systems are business as usual

If request is for access to an existing operational, non-impounded IT system, the requestor will use the existing on-line CURF - no need to log the request.

If request is for a hardcopy document, it follows existing rules: Book Manager is responsible for determining whether the request is valid and whether NASA approval is required.

B. Requests for access to impounded/frozen IT system

Forward required information* to the USA DART email box. Program Integration/Shawn Pifer will coordinate the request with the APM who owns the system, NASA if required, and IM. The request will be expedited and IM Data Management will log the request and forward the request to IM PEOS (PEOS-DART) for implementation and IM ITS (Coleman Tarver) to backfill the required CURF information into eCURF. If the request is from/to another prime contractor, Shawn Pifer will work the request through the NASA Data & Records Handling Working Group (D&RH WG).

Owning org (Impound Manager) will log the request via Documentum.

*Required information for system access is defined in the matrix provided at http://usa1.unitedspacealliance.com/sfocdata/usa/SAF.xls

C. Requests for impounded hardcopy data

If the request** is from within SSP (including authorized teams), USA area impound manager (owning org) will provide a copy and log the request via Documentum.

If request** is from outside SSP or from another contractor not part of the investigation team or is for the original, forward the request to the appropriate Data Release Authorization representative (listed in Table 1 of the NASA MRT/Data and Records Handling Working

Group Policy) and copy the USA DART email box. The request will be logged and worked through the D&RH Working Group. Disposition will be forwarded to the submitter. The USA area impound manager (owning org) will provide it and log the request via Documentum. Any request for original data will require disposition by the Accident Investigation Board.

**A request form, USA 80-001, is available in USA eForms at http://usaflfrm01/e-forms/portal/

NOTE: Forward FOIA requests (or any others that you don't know how to process) to the USA DART mailbox for coordination with Legal and other required parties.

For the purpose of this Internal Letter, hard copy impound data is STS-107 data which is segregated and physically secured in a locked area that is secure from disturbance. Electronic information systems impound data is the STS-107 protected data back up which is segregated and physically secured in a locked area that is secure from disturbance.

Reference: Appendix G, SFOC-PG9608, released under signature of Craig Lovell and Mike McCulley, 7 February 2003.

If you have any questions, please contact Shawn Pifer, 281.212.6039, or Jane Murtishaw, 281.282.3675.

Approved by:

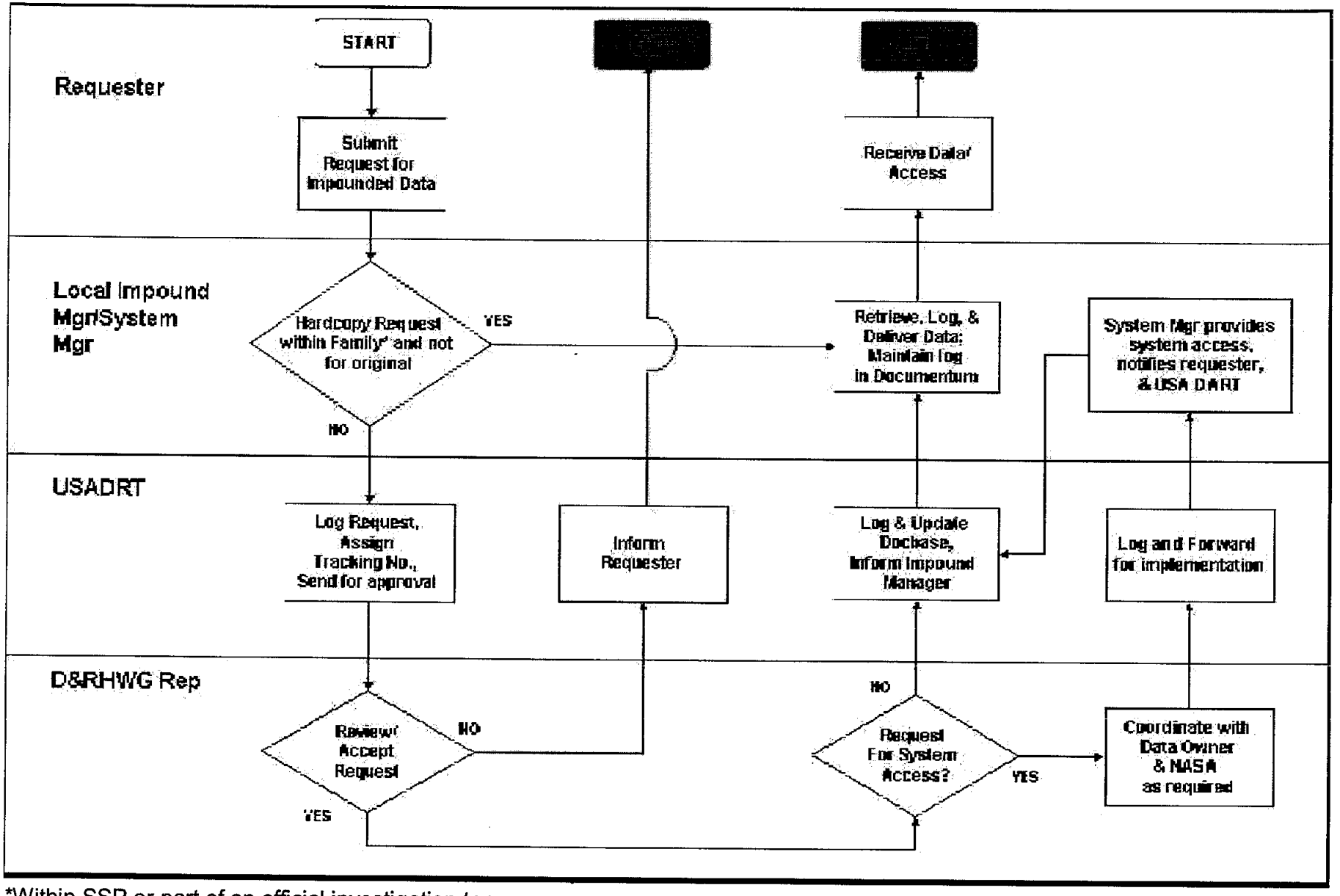
<Original signed by:>

Katherine M. Tamer, Vice President &
Chief Information Officer

<Original signed by:>

Neal Hammond
Associate Program Manager, Program Integration

IMPOUNDED DATA REQUEST FLOW



*Within SSP or part of an official investigation team